

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A pattern forming method of forming film patterns by arranging droplets of a liquid material on a substrate, the method comprising the steps of:

defining a plurality of pattern forming areas on the substrate in which the film patterns are intended to be formed; and

sequentially arranging a plurality of droplets in the plurality of defined pattern forming areas to form the film patterns;

wherein the droplets are sequentially arranged by setting an arrangement order of the droplets to be substantially equal in the plurality of pattern forming areas; and

wherein a periphery portion of the film patterns is formed before an interior portion of the film patterns is formed;

wherein the film patterns are line-shaped patterns, a first side portion and a second side portion in a line width direction of each of the film patterns are formed before a central portion of each of the film patterns is formed between the first side portion and the second side portion;

wherein the first side portion is formed by depositing a plurality of first droplets spaced apart to define a first interval between each of the first droplets and subsequently depositing a second droplet in each of the first intervals;

wherein the second side portion is formed by depositing a plurality of third droplets spaced apart to define a second interval between each of the third droplets and subsequently depositing a fourth droplet in each of the second intervals; and

wherein the central portion is formed by depositing a plurality of fifth droplets between the first and second side portions, the fifth droplets are spaced apart to define a third interval between each of the fifth droplets and subsequently depositing a sixth droplet in each of the third intervals.

2. (Original) The pattern forming method according to Claim 1,
wherein a plurality of unit areas having a lattice shape in which the droplets are arranged are defined on the substrate, and the droplets are arranged in a predetermined unit area of the plurality of unit areas.

3. (Original) The pattern forming method according to Claim 1,
wherein the droplets are arranged essentially simultaneously in the plurality of pattern forming areas.

4. (Cancelled)

5. (Original) The pattern forming method according to Claim 1,
wherein the plurality of pattern forming areas are arranged and defined in a predetermined direction, a plurality of discharge portions for arranging the droplets are provided to correspond to the plurality of pattern forming areas, respectively, and the droplets are arranged while moving the discharge portions in the arrangement direction of the pattern forming areas.

6. (Original) The pattern forming method according to Claim 1,
wherein the liquid material comprises conductive particles.

7. (Currently Amended) A pattern forming method of forming line-shaped film patterns by arranging droplets of a liquid material on a substrate, the method comprising the steps of:

defining a plurality of pattern forming areas on the substrate in which the film patterns are intended to be formed; and

arranging the plurality of droplets in the plurality of defined pattern forming areas, the droplets overlapping a part of the pattern forming areas, to form the film patterns; [.,.]

wherein the arrangement of the droplets is set to be substantially equal in the plurality of pattern forming areas; and

wherein a periphery portion of the film patterns is formed before an interior portion of the film patterns is formed;

wherein the film patterns are line-shaped patterns, a first side portion and a second side portion in a line width direction of each of the film patterns are formed before a central portion of each of the film patterns is formed between the first side portion and the second side portion;

wherein the first side portion is formed by depositing a plurality of first droplets spaced apart to define a first interval between each of the first droplets and subsequently depositing a second droplet in each of the first intervals;

wherein the second side portion is formed by depositing a plurality of third droplets spaced apart to define a second interval between each of the third droplets and subsequently depositing a fourth droplet in each of the second intervals; and

wherein the central portion is formed by depositing a plurality of fifth droplets between the first and second side portions, the fifth droplets are spaced apart to define a third interval between each of the fifth droplets and subsequently depositing a sixth droplet in each of the third intervals.

8. – 9. (Cancelled)

10. (Currently Amended) A method of manufacturing a device having wiring patterns, the method comprising:

a material arranging step of forming the wiring patterns by arranging droplets of a liquid material in a plurality of pattern forming areas which are defined on a substrate and in which the wiring patterns are intended to be formed; [.,.]

wherein the material arranging step includes a step of forming the wiring patterns by sequentially arranging the plurality of droplets in the plurality of defined pattern forming areas; [.,.] and

wherein the droplets are sequentially arranged by setting an arrangement order of the droplets to be substantially equal in the plurality of pattern forming areas; and

wherein a periphery portion of the film patterns is formed before an interior portion of the film patterns is formed;

wherein the film patterns are line-shaped patterns, a first side portion and a second side portion in a line width direction of each of the film patterns are formed before a central portion of each of the film patterns is formed between the first side portion and the second side portion;

wherein the first side portion is formed by depositing a plurality of first droplets spaced apart to define a first interval between each of the first droplets and subsequently depositing a second droplet in each of the first intervals;

wherein the second side portion is formed by depositing a plurality of third droplets spaced apart to define a second interval between each of the third droplets and subsequently depositing a fourth droplet in each of the second intervals; and

wherein the central portion is formed by depositing a plurality of fifth droplets between the first and second side portions, the fifth droplets are spaced apart to define a third interval between each of the fifth droplets and subsequently depositing a sixth droplet in each of the third intervals.

11. (Currently Amended) A method of manufacturing a device having wiring patterns, the method comprising:

a material arranging step of forming the wiring patterns by arranging droplets of a liquid material in a plurality of pattern forming areas which are defined on a substrate and in which the wiring patterns should be formed; [,.]]

wherein the material arranging step includes a step of forming the wiring patterns by arranging the plurality of droplets in the plurality of defined pattern forming areas, the droplets overlapping a part of the pattern forming areas;

wherein the arrangement of the droplets is set to be substantially equal in the plurality of pattern forming areas; and

wherein a periphery portion of the film patterns is formed before an interior portion of the film patterns is formed;

wherein the film patterns are line-shaped patterns, a first side portion and a second side portion in a line width direction of each of the film patterns are formed before a central portion of each of the film patterns is formed between the first side portion and the second side portion;

wherein the first side portion is formed by depositing a plurality of first droplets spaced apart to define a first interval between each of the first droplets and subsequently depositing a second droplet in each of the first intervals;

wherein the second side portion is formed by depositing a plurality of third droplets spaced apart to define a second interval between each of the third droplets and subsequently depositing a fourth droplet in each of the second intervals; and

wherein the central portion is formed by depositing a plurality of fifth droplets between the first and second side portions, the fifth droplets are spaced apart to define a third interval between each of the fifth droplets and subsequently depositing a sixth droplet in each of the third intervals.

12. – 20. (Cancelled)